

File 344:CHINESE PATENTS ABS APR 1985-2002/MAR
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File 347:JAPIO Oct/1976-2001/Dec(Updated 020401)
(c) 2002 JPO & JAPIO
File 350:Derwent WPIX 1963-2001/UD,UM &UP=200223
(c) 2002 Derwent Info Ltd
File 371:French Patents 1961-2002/BOPI 200209
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Set	Items	Description
S1	22609	MOTORCYCLE? OR MOTOR() (CYCLE? OR BIKE? ? OR BICYCLE?) OR M-OTOCYCLE? OR MOTORBIKE?
S2	265	JACK() SHAFT? ?
S3	19	(WIDE OR WIDER OR ENLARG?) () (REAR OR BACK) (5N) (TIRE OR TIR-ES OR TYRE? ? OR WHEEL? ?)
S4	4205	INTERMEDIATE() SHAFT? ?
S5	102	TRANSMISSION(2N) GEAR? ? AND REAR() (WHEEL? ? OR TIRE? ? OR -TYRE? ?) (3N) GEAR? ?
S6	1	SOFTTAIL? OR SOFT() TAIL? ? OR SOFT-TAIL?
S7	6088	TRANSMISSION() SHAFT?
S8	9483	DRIVE() GEAR? ?
S9	4960	DRIVE() BELT? ?
S10	0	S1 AND S6
S11	1	S1 AND S2
S12	1	S11 NOT S6
S13	3	S1 AND S3
S14	3	S13 NOT (S6 OR S11)
S15	14	S1 AND S5
S16	1	S15 AND (S4 OR S7 OR S8 OR S9)
S17	1	S16 NOT (S6 OR S11 OR S13)
S18	0	S15 AND S9
S19	6	S15/TI
S20	5	S19 NOT (S6 OR S11 OR S13 OR S16)
S21	0	S1 AND S4 AND S9
S22	26	S1 AND S9
S23	0	S22 AND S7
S24	0	S22 AND S8
S25	1	S22 AND S3
S26	0	S25 NOT (S6 OR S11 OR S13 OR S16 OR S19)
S27	1	AU="BOURGET J R"
S28	1	S27 NOT (S6 OR S11 OR S13 OR S16 OR S19)

6/5/1 (Item 1 from file: 350)
DIALOG(R) File 350:Derwent WPIX
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000844209

WPI Acc No: 1972-04160T/197203

Rivets prodn - using selective extrusion of rivet head

Patent Assignee: STANDARD PRESSED STEEL CO (STPS)

Number of Countries: 003 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 3626531	A					197203 B
DE 2157885	A					197324
FR 2161793	A					197339

Priority Applications (No Type Date): US 69828956 A 19690529

Abstract (Basic): US 3626531 A

A high strength rivet is formed from a soft-blank having a cylindrical shank; larger dia. head by extruding part of the head in a die to selectively work harden this portion without deforming a work hardening the shank. The rivet may then be age hardened and machined. The ductile **soft tail** portion can be readily upset during rivetting to form a rivet joint which does not crack when bucked or squeezed. Shank has shear strength >150,000 p.s.i. Used partic. in aircraft and aerospace applications.

Title Terms: RIVET; PRODUCE; SELECT; EXTRUDE; RIVET; HEAD

Derwent Class: M21; P52; P54

International Patent Class (Additional): B21K-001/58; B23G-009/00

File Segment: CPI; EngPI

12/5/1 (Item 1 from file: 347)
DIALOG(R) File 347:JAPIO
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00798222 **Image available**
V TYPE ENGINE FOR **MOTORCYCLE**

PUB. NO.: 56-118522 [JP 56118522 A]
PUBLISHED: September 17, 1981 (19810917)
INVENTOR(s): TOMINAGA NOBUYOSHI
KURAI NOBUYOSHI
UENO HAJIME
SUZUKI SADAHIDE
APPLICANT(s): YAMAHA MOTOR CO LTD [001007] (A Japanese Company or
Corporation), JP (Japan)
APPL. NO.: 55-021916 [JP 8021916]
FILED: February 23, 1980 (19800223)
INTL CLASS: [3] F02B-061/02; F02B-075/22
JAPIO CLASS: 21.2 (ENGINES & TURBINES, PRIME MOVERS -- Internal
Combustion)
JOURNAL: Section: M, Section No. 102, Vol. 05, No. 199, Pg. 151,
December 17, 1981 (19811217)

ABSTRACT

PURPOSE: To reduce the height of an engine for a **motorcycle** by disposing a main shaft of a transmission rearwards adjacent a crankshaft such that its axis is located below the axis of the crankshaft so as to enable a rear cylinder to be inclined rearwards at a greater angle.

CONSTITUTION: A front cylinder 1 and a rear cylinder 2 are mounted in a symmetrical relationship on a crankcase 3 including a pair of left and right parts. Respective overhead camshafts 11a, 11b of the cylinders 1, 2 are driven to rotate by a crankshaft 10 through gears 13a, 13b meshed with a gear 12 integral with the crankshaft 10, sprocket wheels 14a, 14b and 15a, 15b, and timing chains 16a, 16b, respectively. A main shaft 20 and a **jack shaft** 21 both constituting a transmission are journaled in a crankcase 3 such that the main shaft 20 is located behind the crankshaft 10 and its axis is located below the axis of the crankshaft 10. Rotation of the **jack shaft** 21 is transmitted to a shaft 26 through gears 27, 28 and then to an output power shaft 29 through a bevel gear 30.

14/5/1 (Item 1 from file: 347)
DIALOG(R)File 347:JAPIO
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03098985 **Image available**

MOTORCYCLE

PUB. NO.: 02-074485 [JP 2074485 A]
PUBLISHED: March 14, 1990 (19900314)
INVENTOR(s): HORIIKE TATSU
APPLICANT(s): HONDA MOTOR CO LTD [000532] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 63-224745 [JP 88224745]
FILED: September 09, 1988 (19880909)
INTL CLASS: [5] B62K-011/00
JAPIO CLASS: 26.2 (TRANSPORTATION -- Motor Vehicles)
JOURNAL: Section: M, Section No. 981, Vol. 14, No. 262, Pg. 47, June 06, 1990 (19900606)

ABSTRACT

PURPOSE: To enable speedier cornering to be performed by connecting a front section member with a front frame via a connecting shaft, arranging a rear wheel for a rear section member, and thereby providing a rotating means which forces the rear section member to be rotated in the direction reverse to the cornering direction around an ordinate axis at the time of cornering.

CONSTITUTION: A main frame 4 is composed of a front section member 5 and a rear section member 8 from which a **wide rear wheel** 9 is suspended, so as to rotatably connected both of them via an ordinate axis 19 so that the rear member 8 is rotated around the ordinate axis 19 to the direction reverse to the cornering direction by a rotating member 24. By this constitution, the rear wheel 7 is shifted so as to be steered while it keeps standing up vertically to the outward direction of cornering toward the axial line of a connecting shaft 10 so that centripetal force takes place in the main frame 4. This makes the magnitude of bank of a front frame 1 small so as to stand against centrifugal force so that the gripping force of a front wheel 3 is concurrently improved, thereby improving cornering performance.

14/5/2 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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013546804 **Image available**

WPI Acc No: 2001-031010/200104

XRAM Acc No: C01-009360

XRPX Acc No: N01-024239

Sprocket for use in driving rear wheel of a motorcycle comprises flanges, spacer, and adhesive layer

Patent Assignee: INNOVATIVE MOTORCYCLE PROD INC (INNO-N)

Inventor: HARRIS G; TALLEY M C

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6139453	A	20001031	US 97807245	A	19970228	200104 B

Priority Applications (No Type Date): US 97807245 A 19970228

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 6139453	A		6 F16H-055/30	

Abstract (Basic): US 6139433 A

NOVELTY - A sprocket (20) comprises first flange (34), second flange, spacer (22), and adhesive layer. The spacer encircles the sprocket and engages the teeth (26) to reduce the width of positive drive belt (12). The adhesive layer is disposed between the first guide flange, teeth, and spacer.

DETAILED DESCRIPTION - A sprocket having aligned spaced teeth and engaged by a positive drive belt comprises first and second flanges, a spacer, and an adhesive layer. The flanges on opposite sides of the sprocket are extending outward to dispose the teeth between them and retain the radial alignment of belt with the teeth. The spacer encircles the sprocket and engages the teeth to reduce the belt width. The adhesive layer is disposed between the first guide flange, teeth, and spacer.

USE - For use in driving the rear wheel of a **motorcycle**.

ADVANTAGE - The sprocket allows for the use of super-wide tire without requiring an offset of the motor, transmission, or existing sprocket and without changing frames or swingarms. It reduces the width of the belt and prevents interference between the belt and super- wide rear tire.

DESCRIPTION OF DRAWING(S) - The drawing shows a side elevation partially cut-away of a drive system which includes a belt driven sprocket.

Positive drive belt (12)
Sprocket (20)
Spacer (22)
Teeth (26)
First flange (34)
pp; 6 DwgNo 2/4

Title Terms: SPROCKET; DRIVE; REAR; WHEEL; **MOTORCYCLE**; COMPRISE; FLANGE; SPACE; ADHESIVE; LAYER

Derwent Class: A88; Q64

International Patent Class (Main): F16H-055/30

International Patent Class (Additional): F16H-007/18; F16H-055/49

File Segment: CPI; EngPI

14/5/3 (Item 2 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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012218951 **Image available**

WPI Acc No: 1999-025057/199903

XRPX Acc No: N99-019333

Adaptor set for attachment of wider tyre to motorcycle - has spacer bush at end of extension axle of crank-shaft for moving transmission in direction of engine block

Patent Assignee: BOURGUIGNON E (BOUR-I)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
BE 1010701	A4	19981201	BE 96884	A	19961017	199903 B

Priority Applications (No Type Date): BE 96884 A 19961017

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
BE 1010701	A4	F 12	B62M-000/00	

Abstract (Basic): BE 1010701 A

The adaptor set has a charge ring which is installed prior to assembly between the engine block and the primary case of the **motorcycle**. The adaptor set has a first spacer bush provided prior to assembly within the primary case on an extension axle of the

crank-shaft to shift the transmission in the direction of the engine block.

The adaptor set has a second spacer bush and a drive wheel with a tooth width of not more than 40 mm.

USE - For mounting **wider back tyre** with in **motorcycle** that was originally provided with back wheel of tyre width 130 mm.

ADVANTAGE - Allows back wheel to receive tyre up to 210 mm wide.

Dwg.1/2

Title Terms: ADAPT; SET; ATTACH; WIDE; TYRE; **MOTORCYCLE** ; SPACE; BUSH; END
; EXTEND; AXLE; CRANK; SHAFT; MOVE; TRANSMISSION; DIRECTION; ENGINE;
BLOCK

Derwent Class: Q23

International Patent Class (Main): B62M-000/00

File Segment: EngPI

17/5/1 (Item 1 from file: 350)
DIALOG(R) File 350:Derwent WPIX
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010369502 **Image available**
WPI Acc No: 1995-270864/199536
XRPX Acc No: N95-208400

Motorcycle and sidecar wheel transmission - has two half shafts with
differential and universal joints driving rear and side wheels and front
wheel also driven

Patent Assignee: VOGEL J (VOGE-I)

Inventor: VOGEL J

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
FR 2715630	A1	19950804	FR 941554	A	19940201	199536 B

Priority Applications (No Type Date): FR 941554 A 19940201

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
FR 2715630	A1		14	B62M-017/00	

Abstract (Basic): FR 2715630 A

The **motorcycle** frame (12) carries the sidecar (28), with its side wheel (42), on a tubular chassis (30). The **motorcycle** has an engine (18) and **transmission gear** box, driving the **rear wheel** (16) by a shaft (22), with universal joints. The sidecar wheel is driven from this by **transmission shafts** (46) as also (48) is the front wheel (14).

The two rear half shafts and the front shaft may be equipped with brakes (100), with a braking distributor (112). The rear half shafts (50,60) rotate on the sidecar chassis, with universal joints and a differential (56), between the transmission box and wheels.

ADVANTAGE - Stable on all surfaces, safe brakes/steering.

Dwg.1/1

Title Terms: **MOTORCYCLE** ; **SIDECAR**; **WHEEL**; **TRANSMISSION**; **TWO**; **HALF**; **SHAFT**;
DIFFERENTIAL; **UNIVERSAL**; **JOINT**; **DRIVE**; **REAR**; **SIDE**; **WHEEL**; **FRONT**; **WHEEL**;
DRIVE

Derwent Class: Q23

International Patent Class (Main): B62M-017/00

International Patent Class (Additional): B62K-027/02; B62M-011/02

File Segment: EngPI

20/5/1 (Item 1 from file: 347)
DIALOG(R)File 347:JAPIO
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03218248 **Image available**
MOTORCYCLE WITH ANTILOCK CONTROL DEVICE

PUB. NO.: 02-193748 [JP 2193748 A]
PUBLISHED: July 31, 1990 (19900731)
INVENTOR(s): MAKINO HIROKI
APPLICANT(s): HONDA MOTOR CO LTD [000532] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 01-011053 [JP 8911053]
FILED: January 20, 1989 (19890120)
INTL CLASS: [5] B60T-008/54
JAPIO CLASS: 26.2 (TRANSPORTATION -- Motor Vehicles)
JAPIO KEYWORD: R068 (TRANSPORTATION -- Anti-skid, Anti-lock Devices)
JOURNAL: Section: M, Section No. 1036, Vol. 14, No. 478, Pg. 161, October 18, 1990 (19901018)

ABSTRACT

PURPOSE: To enable maintenance to be quickly carried out by connecting a transmission gear to one end of an axle whose intermediate part is rotatably journaled to the rear end of a rear fork, while by fixing the other end of the axle to the hub of the rear wheel.

CONSTITUTION: A hollow axle 8 is rotatably journaled to the rear end of a rear fork 3 via right and left bearings 9, 10, and on one end of this axle 8, a driven sprocket 11 of a chain transmission gear is spline-fitted and is fixed by a nut 100. On the other end of the axle 8, the hub 12 of a rear wheel Wr is fitted, and the hub 12 is lockedly interposed between a fitting flange 8a and a wedge member 103 which is tightened on the axle 8 by means of a through bolt 101 and a nut 102. And both a brake disc 6 and the large diameter gear 43 of a speed increasing gear 45 are fixed to the flange 8a by a bolt 13. For the maintenance of the chain transmission gear and the rear wheel Wr, when the nut 100 and the through bolt 101 are removed from the axle 8, only the driven sprocket 11 or the rear wheel Wr can be removed from the axle 8.

20/5/2 (Item 2 from file: 347)
DIALOG(R)File 347:JAPIO
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03170726 **Image available**
RELAXATION DEVICE FOR REMAINING UNBALANCED INERTIA FORCE FOR MOTOR CYCLE

PUB. NO.: 02-146226 [JP 2146226 A]
PUBLISHED: June 05, 1990 (19900605)
INVENTOR(s): ITO TOSHIBUMI
APPLICANT(s): HONDA MOTOR CO LTD [000532] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 01-260207 [JP 89260207]
FILED: October 06, 1989 (19891006)
INTL CLASS: [5] F02B-061/02; B62J-007/02; F02B-077/00
JAPIO CLASS: 21.2 (ENGINES & TURBINES, PRIME MOVERS -- Internal Combustion); 26.2 (TRANSPORTATION -- Motor Vehicles)
JOURNAL: Section: M, Section No. 1014, Vol. 14, No. 388, Pg. 88, August 22, 1990 (19900822)

ABSTRACT

PURPOSE: To contrive to reduce oscillation by rotatably mounting a balance shaft in front of a crank shaft, and thereby concurrently controlling the

output of the crank shaft to be transmitted to rear wheels via power transmitting members furnished with damper function in a motor cycle equipped with a transverse type multi-cylinder V-engine.

CONSTITUTION: In a motor cycle 1 equipped with a V-engine 3 which has two groups of cylinders arranged in front and in rear in such a way as to form a V-type with an included angle of about 70 deg. while its crank shaft 4 is directed to the transversal direction of a body, a balancer 8 is rotatably borne forward from the crank shaft 4 in parallel with the shaft. The balancer 8 is formed with balance weights 10a and 10b, and the balancer 8 is connected with the crank shaft 4 via gears 11 and 12 so as to be interlocked therewith in angular relation that the primary term of remaining unbalanced inertia force of reciprocating masses in the engine 3 is cancelled by these balance weights 10a and 10b. Then, the output of the crank shaft 4 is transmitted to rear wheels via transmission gear groups 24 and 25 and a drive chain 29.

20/5/3 (Item 3 from file: 347)
DIALOG(R)File 347:JAPIO
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01670289
FRONT AND REAR WHEEL POWER TRANSMISSION GEAR FOR MOTORCYCLE

PUB. NO.: 60-148789 [JP 60148789 A]
PUBLISHED: August 06, 1985 (19850806)
INVENTOR(s): YOSHIDA TERUAKI
APPLICANT(s): YOSHIDA TERUAKI [000000] (An Individual), JP (Japan)
APPL. NO.: 59-005445 [JP 845445]
FILED: January 14, 1984 (19840114)
INTL CLASS: [4] B62M-009/02; B62M-017/00
JAPIO CLASS: 26.2 (TRANSPORTATION -- Motor Vehicles)

20/5/4 (Item 4 from file: 347)
DIALOG(R)File 347:JAPIO
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01209356 **Image available**
SPEED CHANGE GEAR FOR MOTORCYCLE

PUB. NO.: 58-146756 [JP 58146756 A]
PUBLISHED: September 01, 1983 (19830901)
INVENTOR(s): HATTORI TORAO
APPLICANT(s): HONDA MOTOR CO LTD [000532] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 57-027667 [JP 8227667]
FILED: February 23, 1982 (19820223)
INTL CLASS: [3] F16H-037/02; B60K-017/04; B62M-017/00
JAPIO CLASS: 22.2 (MACHINERY -- Mechanism & Transmission); 26.2 (TRANSPORTATION -- Motor Vehicles)
JOURNAL: Section: M, Section No. 259, Vol. 07, No. 269, Pg. 13, November 30, 1983 (19831130)

ABSTRACT

PURPOSE: To improve transmission efficiency and to expand the range of the overall speed change ratio by interposing a torque converter between a crankshaft of an engine and a V-belt stepless speed change gear, and disposing an interlocking type transmission gear in parallel to the speed change gear.

CONSTITUTION: The revolution of a crankshaft 1 caused by an engine E of a

motor cycle is transmitted to an input shaft 2 of a speed change gear M, and a rear wheel Wr is rotated by revolution of an output shaft 3 suitably changed in speed. In this case, a fluid torque converter Tc as a torque converter is mounted on the input shaft 2, and a turbine blade T which is an output member of the converter is coupled to the input shaft 2. The speed change gear M comprises a V-belt stepless speed change gear Ma and an interlocking type transmission gear Mb which are disposed side by side. An operation selection device comprising clutches C(sub 1), C(sub 2) for alternatively operating either of the above gears is mounted between the input shaft 2 and the output shaft 3.

20/5/5 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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007224562

WPI Acc No: 1987-221570/198732

XRPX Acc No: N87-165818

Off road motorcycle drive - has torque converter connected to gear
transmission driving rear wheel and clutch to front wheel

Patent Assignee: ROKON LTD (ROKO-N)

Inventor: HAMILTON M

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
CA 1224158	A	19870714	CA 468151	A	19841119	198732 B
US 4702340	A	19871027	US 86875332	A	19860617	198745

Priority Applications (No Type Date): US 83552744 A 19831117; US 85774059 A
19850909

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
CA 1224158	A		17		
US 4702340	A		8		

Abstract (Basic): CA 1224158 A

The motorcycle comprises a frame, with a fork supporting the front wheel from the frame. A rear wheel is supported from the frame. A vehicle engine is supported in the frame and has an output drive shaft. A torque converter is mounted from the engine drive shaft. A transmission has an input shaft, an output shaft and a gear selector.

The output of the torque converter is connected to the input shaft of the transmission. The transmission has multiple engageable gears controlled by the gear selector. The selector has a shifter moveable to separate alternate position for providing different gear ratio drive at the transmission output shaft. A chain is coupled from the transmission output shaft to the rear wheel for providing direct drive to the rear wheel. A one way clutch drives the front wheel.

/6

Title Terms: ROAD; MOTORCYCLE; DRIVE; TORQUE; CONVERTER; CONNECT; GEAR;
TRANSMISSION; DRIVE; REAR; WHEEL; CLUTCH; FRONT; WHEEL

Derwent Class: Q23

International Patent Class (Additional): B62M-007/06

File Segment: EngPI

28/5/1 (Item 1 from file: 350)
DIALOG(R) File 350:Derwent WPIX
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012813063 **Image available**
WPI Acc No: 1999-619294/199953
XRPX Acc No: N99-456643

Motor cycle frame structure

Patent Assignee: BOURGET J R (BOUR-I)
Inventor: BOURGET J R
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5975230	A	19991102	US 9823892	A	19980213	199953 B

Priority Applications (No Type Date): US 9823892 A 19980213

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 5975230	A	8	B62D-061/02	

Abstract (Basic): US 5975230 A

NOVELTY - Tubular frames (32,34,36) define hollow channels. An oil fill port with cap (74) is provided above the lower most portion of a frame (32) into which user supplies lubricating oil, which flows inside hollow channel. When the lubricating oil is not supplied to the port, it is closed by the oil fill cap.

DETAILED DESCRIPTION - An oil drain port (80) is provided for allowing the user to drain contaminated lubricating oil from each hollow channel.

USE - In motor cycles for providing seating area closer to ground.

ADVANTAGE - As the lubricating oil is stored within the hollow channels defined by the frames, no separate oil reservoir is required, thereby achieving the objective of lowering sitting area.

DESCRIPTION OF DRAWING(S) - The figure shows the perspective view of motor cycle frame structure.

Frames (32,34,36)

Cap (74)

Oil drain port (80)

pp; 8 DwgNo 4/8

Title Terms: MOTOR; CYCLE; FRAME; STRUCTURE

Derwent Class: Q22

International Patent Class (Main): B62D-061/02

File Segment: EngPI